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## Chapter 3 Personal Financial Planning

## SOFTWARE ACTIVITY <br> (OPTIONAL)

## Spreadsheet Application

Calculating and Analyzing Personal Investment Strategies
Objective: Illustrate the value of compounding and the importance of long-term saving and investment strategies.

## Practice Situation

The following data presents two investment strategies. For strategy 1, assume that Beverly contributes $\$ 1,000$ annually to her investment account from age 18 through age 24. For strategy 2 , Matt contributes $\$ 1,000$ annually to his investment account beginning at age 28 through age 65. For each strategy presented, assume that the investment will generate an average rate of return of 10 percent per year. Calculate the future values for both investment strategies at age 65, then answer the questions on the next page.

| Strategy 1: Beverly |  |  |
| :---: | :---: | :---: |
| Age | Annual <br> Contribution | Year-end <br> Value |
| 18 | 1,000 |  |
| 19 | 1,000 |  |
| 20 | 1,000 |  |
| 21 | 1,000 |  |
| 22 | 1,000 |  |
| 23 | 1,000 |  |
| 24 | 1,000 |  |
| 64 | 0 |  |
| 65 | 0 |  |
|  | Summary Data: |  |
|  | Principal Invested |  |
|  | Future Value |  |
|  | Investment Return |  |


| Strategy 2: Matt |  |  |
| :---: | :---: | :---: |
| Age | Annual <br> Contribution | Year-end <br> Value |
| 25 | 0 |  |
| 26 | 0 |  |
| 27 | 0 |  |
| 28 | 1,000 |  |
| 29 | 1,000 |  |
| 30 | 1,000 |  |
| 31 | 1,000 |  |
| 64 | 1,000 |  |
| 65 | 1,000 |  |
|  | Summary Data: |  |
|  | Principal Invested |  |
|  | Future Value |  |
|  | Investment Return |  |

Continue spreadsheet data from years 25 through 63.
$\qquad$ Date $\qquad$ Class $\qquad$

## Spreadsheet Directions

1. Start your spreadsheet software and open problem SA01.xls. Enter the data into the spreadsheet. For Strategy 1, invest $\$ 1,000$ annually from age 18 to age 24 . For years 25 through 65, the annual investment equals $\$ 0$. In Strategy 2, do not invest anything until age 28. At this point, $\$ 1,000$ is invested each year through retirement at age 65.
2. Input the formulas to calculate the following:

- Year-end values
- Total principal invested
- Total future value
- Return on investment

Note: Format all dollar amounts to Currency, 2 decimals.
3. Perform the calculations, then save your work to a new file labeled SA01***.xls. (Replace *** with your initials.)
4. Print out a copy of your work if your teacher has instructed you to do so.

## Interpreting Results

1. What is the total investment for each investment strategy?
2. What are the future values associated with each strategy?
3. Which strategy would generate the largest return on investment at age 65 ?

## Drawing Conclusions

1. Based on your calculations, which investor has executed the more favorable investment strategy? Explain.
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2. Why is it important for young adults to understand how to save, invest, and use money wisely?
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## Chapter 4 Finances and Career Planning

## SOFTWARE ACTIVITY <br> (OPTIONAL) <br> Spreadsheet Application

## Comparing Employment Offers

Objective: Calculate and analyze the monetary values of employee benefits and employment opportunities.

## Practice Situation

You have been offered two different jobs. Job 1 offers a salary of $\$ 45,200$, a one-time sign-on bonus of $\$ 2,000$, and nontaxable employee benefits of $\$ 4,000$. Job 2 pays $\$ 47,000$ and $\$ 6,100$ in nontaxable benefits. Job 2 requires a move to another city where the cost of living is 2 percent higher than that of the Job 1 location. The Job 2 employer will pay for moving expenses. Job 1 offers annual raises of 8 percent, while Job 2 offers annual raises of 3 percent. Compute the monetary values of both job offers for the next two years, then answer the questions that follow. Use a 28 percent tax rate.

| Year One Monetary Value | Job 1 | Job 2 |
| :--- | :--- | :--- |
| Salary |  |  |
| Bonus |  |  |
| Nontaxable benefits |  |  |
| Tax savings on nontaxable benefits |  |  |
| Less: Cost of Living Adjustment |  |  |
| Year One Monetary Value |  |  |


| Year Two Monetary Value | Job 1 | Job 2 |
| :--- | :--- | :--- |
| Salary |  |  |
| Bonus |  |  |
| Nontaxable benefits |  |  |
| Tax savings on nontaxable benefits |  |  |
| Less: Cost of Living Adjustment |  |  |
| Year Two Monetary Value |  |  |


| Summary Information | Job 1 | Job 2 |
| :--- | :---: | :---: |
| Years One \& Two Monetary Value |  |  |

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## Spreadsheet Directions

1. Start your spreadsheet software and open problem SA02.xls. For year one, enter the salary figures for both job opportunities into the spreadsheet. Next, enter the bonus amount for Job 1.
2. Input the formulas to calculate the tax savings on the nontaxable benefits for both jobs.
3. Input the formula to calculate the cost of living adjustment for Job 2. Hint: A higher cost of living will mean a deduction to the monetary value of the job offer.
4. Input the formulas to calculate the total monetary value for each job option for the first year. Note: Format all dollar amounts to Currency, 2 decimals.
5. Next complete the spreadsheet for Year Two. Input the formulas to calculate the new salary figures, accounting for the annual raise.
6. Enter the formulas (or copy the formulas from the spreadsheet you just completed) to calculate the tax equivalent value for the nontaxable benefits for both jobs.
7. Enter the formula to calculate the cost of living adjustment based on the new salary amount for Job 2.
8. Calculate the totals for both jobs for year two.
9. Save your work to a new file labeled SA02***.xls. (Replace *** with your initials.)
10. Print out a copy of your work if your teacher has instructed you to do so.

## Interpreting Results

1. What is the monetary value for both job opportunities in year one?
2. What is the monetary value for both job opportunities in year two?
$\qquad$
3. What is the cumulative monetary value for each job at the end of year two?

## Drawing Conclusions

1. If you plan to work at the job that you accept for at least two years, which opportunity would be the favorable choice based only on financial concerns? Explain.
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2. Aside from financial implications, what other issues should be considered when comparing two job opportunities?
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## Chapter 6 Consumer Purchasing and Protection

SOFTWARE<br>ACTIVITY<br>(OPTIONAL)

## Spreadsheet Application

## Comparing Consumer Purchase Alternatives

Objective: Assess and compare the financial implications of purchase options.

## Practice Situation

Megan plans to buy a new mountain bike and must evaluate the following purchase options. Cycle Tech Bike Shop is offering the model that Megan likes for \$289. The price includes a 6-month standard warranty. The clerk has recommended that she purchase an extended warranty for $\$ 40$. The extended warranty will cover any repairs on her purchase for an additional 6 months. Megan likes the idea of the extended warranty because she knows this will protect her from unexpected repair costs.

Ann's Bike Shop is selling the same model for 10 percent off the tag price of $\$ 330$. A 6-month standard warranty is also included in the price at Ann's, but they do not offer an extended warranty plan. Megan estimates that she would spend no more than $\$ 40$ on repairs from month 7 through 12 after the purchase.

Megan also needs to purchase a helmet. Ann's Bike Shop has offered to throw in the helmet at no cost if Megan buys the bike from them. The helmet sells for $\$ 32$ in both shops.

Use a sales tax rate of 8.5 percent and compare the purchase options. Answer the questions on the next page.

|  | Cycle Tech Bike Shop | Ann's Bike Shop |
| :--- | :--- | :--- |
| Cost of mountain bike |  |  |
| Extended warranty price |  |  |
| Helmet |  |  |
|  |  |  |
|  |  |  |
| Subtotal |  |  |
| Total Purchase |  |  |
| Repairs during the first year |  |  |
| Total Cost |  |  |

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## Spreadsheet Directions

1. Start your spreadsheet software program and open problem SA04.xls.
2. Use the data listed on the previous page to complete the total cost of the purchase from Cycle Tech Bike Shop. Insert formulas to calculate Subtotal, Sales Tax, Total Purchase, and Total Cost. Note: Format all dollar amounts to Currency, $\underline{2}$ decimals.
3. Record the costs associated with the purchase of the bike at Ann's Bike Shop. Insert the formula to calculate the cost of the mountain bike less the discount offered. Then, insert the formulas for Subtotal, Sales Tax, Total Purchase, and Total Cost.
4. Perform your calculations and complete the spreadsheet, then save your work to a new file labeled SA04***.xls. (Replace **** $^{*}$ with your initials.)
5. Print out a copy of your work if your teacher has instructed you to do so.

## Interpreting Results

1. What is the Total Cost of the purchase from Cycle Tech Bike Shop? $\qquad$
2. If Megan's estimate for repairs from month 7 through month 12 on the bike were correct, what is the Total Cost of the purchase from Ann's Bike Shop?

## Drawing Conclusions

1. Based on your calculations, which bike shop is offering the best value to Megan on her desired purchase? Explain.
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2. What financial risks or benefits can you identify that Megan should consider in her decision? What nonfinancial risks or benefits should Megan consider?
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## Chapter 9 The Finances of Housing

SOFTWARE<br>ACTIVITY<br>(OPTIONAL)

## Spreadsheet Application

## Comparing Housing Alternatives

Objective: Effectively compare and analyze the financial implications involved in a buy-versus-rent decision.

## Practice Situation

The following data represents two housing alternatives. Alternative 1 presents the costs associated with renting an apartment. Alternative 2 offers data related to the purchase of a home. Calculate the annual total expenses required for each option, then answer the questions on the next page.

Alternative 1: An apartment is available at a monthly rent of $\$ 750$. Renters insurance will cost $\$ 75$ per quarter. A $\$ 1,000$ security deposit is required on the apartment.

Alternative 2: The cost of a home is $\$ 95,000$. You are considering a 30 -year conventional fixed-rate mortgage. The mortgage interest rate is 8 percent and you plan to pay a down payment of $\$ 9,500$. The monthly payment will be $\$ 627$. You will pay approximately $\$ 6,800$ in mortgage interest for the first year. You anticipate that closing costs will be $\$ 2,000$. The annual property taxes are estimated to be $\$ 2,500$, and homeowners insurance has been computed to be $\$ 500$. You anticipate spending approximately 1.5 percent of the cost of the home per year for its maintenance. Assume that homes in your geographic area appreciate at approximately 3 percent of their cost annually.

For both alternatives, assume an after-tax savings interest rate of 5 percent and a tax rate of 30 percent.

## Spreadsheet Directions

1. Start your spreadsheet software program and open problem SA07.xls. Use the information presented for each alternative and enter the data into the spreadsheet. Remember to use formulas to calculate annual amounts. Note: Format all dollar amounts to Currency, $\underline{2}$ decimals.
2. Insert the formulas to compute tax savings for mortgage interest and property taxes by multiplying the payments by the tax rate.
3. Insert the formulas to compute the Total Annual Cost of Renting and the Total Annual Cost of Buying.
4. Perform your calculations and complete the spreadsheet, then save your work to a new file labeled SA07***.xls. (Replace*** with your initials.)
5. Print out a copy of your work if your teacher has instructed you to do so.
$\qquad$ Date $\qquad$ Class $\qquad$

## Interpreting Results

1. What is the total annual cost associated with each housing alternative?
2. Based on your calculations for alternative 2, what actual total cash outlay would be required in the first year of the purchase?
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## Drawing Conclusions

1. Based upon your computations, which scenario would be the favorable decision based on financial considerations? Explain.
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2. What other nonfinancial advantages and disadvantages should be considered for each alternative?
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## Chapter 10 Saving and Investing

## SOFTWARE <br> ACTIVITY <br> (OPTIONAL)

## Spreadsheet Application

## Charting the Performance of an Investment

Objective: Chart the performance of a stock price and calculate the total return on a stock transaction.

## Practice Situation

The following information illustrates the monthly price for a share of Eastman Kodak common stock.

| January 1 | $\$ 56$ | July 1 | $\$ 55$ |
| :--- | :--- | :--- | :--- |
| February 1 | $\$ 58$ | August 1 | $\$ 56$ |
| March 1 | $\$ 52$ | September 1 | $\$ 59$ |
| April 1 | $\$ 52$ | October 1 | $\$ 61$ |
| May 1 | $\$ 53$ | November 1 | $\$ 62$ |
| June 1 | $\$ 56$ | December 1 | $\$ 63$ |

Rachael Campbell purchased 300 shares of Eastman Kodak common stock on March 1. She paid a commission of $\$ 80$. On December 1, Rachael sold all 300 shares. That commission was $\$ 85$. Dividends were $\$ 3.36$ per share for the period of March 1-December 1.

Use a spreadsheet to chart the price of one share of Eastman Kodak stock from January 1 through December 1. Next, compute the total return on Rachael's investment. Answer the questions on the next page.

## Spreadsheet Directions

1. Start your spreadsheet software program and open problem SA08.xls. Enter the monthly stock price data into the spreadsheet.
2. To create a chart of the stock price data you have entered, select Insert from the Toolbar at the top of the screen. Then, select Chart from the menu choices.
3. Choose Column as the type of chart you wish to create. Click Next.
4. Select the Data Range by clicking on the small spreadsheet icon to the right of the Data Range field. Then, on the spreadsheet, select the cells that contain the data and labels you want displayed in the chart. Click Next.
5. Type Eastman Kodak Stock Prices as the Chart title.
6. Type Month as the Category ( X ) axis. Type Price as the Value ( Y ) axis. Click Next.
7. For placement of the chart, select the option: Set chart as object in Sheet 1. Click Finish.
8. Your chart should now be inserted on the same spreadsheet as your data. You may click on the chart's edges to resize or drag it to another location within the sheet.
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9. Enter the data for Rachael's stock transactions. First, enter the data for the purchase of the stock on March 1. Next, enter the data for the sale of the stock on December 1. Note: Format all dollar amounts to Currency, $\underline{2}$ decimals.
10. Compute the transaction summary information.
11. When your calculations are completed, save your work to a new file labeled SA08***.xls. (Replace *** with your initials.)
12. Print out a copy of your work if your teacher has instructed you to do so.

## Interpreting Results

1. Based on the chart that you created for the stock prices of Eastman Kodak common stock, what is the overall trend of this investment? Explain.
2. What was Rachael's total return on her stock transactions at December 1?

## Drawing Conclusions

1. In addition to the profit from the sale of the stock that Rachael gained, what other financial benefit did she experience from the Eastman Kodak stock transaction? Explain.
2. Discuss the financial implications involved when deciding to sell a stock investment. For example, if Rachael had sold her stock on November 1 instead of December 1, what implications would have been involved? Did Rachael choose a favorable time to sell her stock? Explain.
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## Chapter 11 Stocks

## SOFTWARE <br> ACTIVITY <br> (OPTIONAL)

## Spreadsheet Application

## Comparing the Performance of Stock Investments

Objective: Evaluate the performance of securities using numeric measurements for investment yield, current return, total return, capital gain, and earnings ratios.

## Practice Situation

Phillip owns the following stocks and wishes to evaluate the performance of his investments. He read recently that many stock analysts predict declining returns on pharmaceutical and medical stocks for the near future. Phillip wants to verify for himself that this trend is occurring. He presents the following data on his portfolio. Calculate the current yield, current return, capital gain, total return, earnings per share, and price-earnings ratio for both of Phillip's investments for the past two years. Compare the performance of each stock for each year and then answer the questions that follow.

## Rudland Pharmaceuticals 6/1/2008-5/31/2009

Purchased 160 shares at $\$ 38 /$ share on $6 / 1 / 2008$ Annual dividends paid: $\$ 1.62$ per share Market value at $5 / 31 / 2009=\$ 41.00$
Rudland Pharmaceuticals reported net earnings of $\$ 2,200,000$ with 200,000 outstanding shares of common stock

6/1/2009-5/31/2010
Annual dividends paid: $\$ 1.55$ per share
Market value at $5 / 31 / 2010=\$ 37.00$
Rudland Pharmaceuticals reported net earnings of $\$ 2,100,000$ with 220,000 outstanding shares of common stock

## A\&R Medical Technologies <br> 6/1/2008-5/31/2009

Purchased 220 shares at $\$ 35.50 /$ share on 6/1/2008
Annual dividends paid: $\$ 1.85$ per share
Market value at $5 / 31 / 2009=\$ 38.00$
A\&R Medical Technologies reported net earnings of $\$ 750,000$ with 100,000 outstanding shares of common stock

6/1/2009-5/31/2010
Annual dividends paid: $\$ 1.55$ per share
Market value at $5 / 31 / 2010=\$ 36.00$
A\&R Medical Technologies reported net earnings of $\$ 765,000$ with 120,000 outstanding shares of common stock

## Spreadsheet Directions

1. Start your spreadsheet software program and open problem SA09.xls.
2. Using the data presented for both stocks for the period 6/1/2008-5/31/2009, calculate the following:

- Current Yield • Total Return
- Current Return
- Earnings per share
- Capital Gain
- Price-earnings ratio

Note: Format your calculated amounts for Current Yield as a Percentage, 2 decimal places. Format your calculated amounts for Current Return, Capital Gain, Total Return, and Earnings per share as Currency, $\underline{2}$ decimal places. The price-earnings ratio amounts should be formatted to Number, $\underline{2}$ decimal places.
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3. Using the data presented for the period $6 / 1 / 2009-5 / 31 / 2010$, calculate the same performance measurements for both stocks.
4. When you have completed your calculations, save your work to a new file labeled SA09***.xls. (Replace *** with your initials.)
5. Print out a copy of your work if your teacher has instructed you to do so.

## Interpreting Results

1. What was the total return for Rudland Pharmaceuticals stock for the year ended 5/31/2009? For the year ended $5 / 31 / 2010$ ? $\qquad$
2. Is Phillip's Rudland Pharmaceutical stock investment experiencing an increase or a decline in total return? $\qquad$
3. What was the current yield for A\&R Medical Technologies stock for the year ended $5 / 31 / 2009$ ? For the year ended $5 / 31 / 2010$ ? $\qquad$

## Drawing Conclusions

1. Based on your calculations for these two years, would you agree with the opinions of the stock analysts? Are Phillip's investments experiencing a decline in performance and returns? Explain.
2. Phillip wonders whether he should consider selling his stock. What other issues should Phillip consider as he evaluates his investment returns and goals?
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## Chapter 12 Bonds and Mutual Funds

SOFTWARE<br>ACTIVITY<br>(OPTIONAL)

## Spreadsheet Application

## Calculating Profit or Loss on a Bond Transaction

Objective: Calculate the profit or loss realized on a bond transaction.

## Practice Situation

Assume that you purchased an $83 / 8$ percent Phoenix Municipal Water Bond on of $\$ 675$. The bond holds a maturity date of 2026 . On December 1,2016 , you sold the bond at its current market value of $\$ 1,050$. Complete the spreadsheet to determine the total profit or loss on the bond transaction. Then, answer the questions that follow.

| Purchase Costs |  |
| :--- | :--- |
| 1 bond @ $\$ 650$ |  |
| Plus commission cost |  |
| Total investment |  |


| Returns when Sold |  |
| :--- | :--- |
| 1 bond @ $\$ 1,050$ |  |
| Minus commission fee |  |
| Total return on sale |  |


| Transaction Summary |  |
| :--- | :--- |
| Total return on sale |  |
| Minus total investment |  |
| Profit from bond sale |  |
| Plus interest |  |
| Total profit and interest on transaction |  |

## Spreadsheet Directions

1. Start your spreadsheet software program and open problem SA10.xls.
2. Using the data presented, first input the purchase costs for the bond. Note: Format all dollar amounts to Number, $\underline{2}$ decimal places. Use 1000 Separator (,).
3. Next, input the data for the dollar returns on the sale of the bond.
4. Complete the transaction summary information. When computing the interest on the bond, remember to multiply the annual interest earned by the number of years that the bond has been held.
5. When you have completed your spreadsheet, save your work to a new file labeled SA10***.xls. (Replace *** with your initials.)
6. Print out a copy of your work if your teacher has instructed you to do so.
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## Interpreting Results

1. What was your total investment for the bond on December 1, 2006 ? $\qquad$
2. What were the total dollar returns on the sale of the bond on December 1, 2016? $\qquad$
3. What total interest income was earned on the bond for the period of 12/1/2006 through 12/1/2016? $\qquad$
4. What total profit and interest was earned on the bond transaction?

## Drawing Conclusions

1. In this example, the Phoenix Municipal Water bond was sold well in advance of its maturity date. If the bond had been held until its maturity date, what total interest would have been earned over the life of the bond?
2. What factors might cause an investor to sell a bond prior to its maturity date? How might fluctuations in the overall interest rates of the economy impact bond market values? Explain.
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## Chapter 13 Real Estate and Other Investments

## SOFTWARE <br> ACTIVITY <br> (OPTIONAL)

## Spreadsheet Application

## Choosing Investment Alternatives

Objective: Compare and assess the potential rewards and risks associated with investment alternatives.

## Practice Situation

Raju's parents gave him $\$ 2,000$ as a graduation gift. He is very interested in the real estate industry and wonders whether he could invest in that area.

His father suggests that Raju might invest his money in a mutual fund participation certificate. He can buy into a mutual fund offered by the Federal Home Loan Mortgage Corporation for $\$ 2,000$. He will be charged a 1 percent commission on the purchase of the certificate. The guaranteed return on this investment is 5.5 percent annually. Raju plans to cash out any interest he earns in the mutual fund as it is paid to him. Assume the participation certificate will increase in value by 11 percent in four years.

As a second alternative, Raju researched the possible purchase of Oracle Corporation common stock, currently selling at $\$ 80$ per share. Recent news featured the Oracle Internet platform and forecasted heavy use by Web developers worldwide. Oracle paid dividends of $\$ 3.87$ per share for the last year. Assuming this dividend will be paid at the same level over the next four years, calculate the annual dollar returns that Raju can expect for this option. Raju will have to pay a $\$ 50$ fee for this stock purchase. In researching this stock, he finds that Oracle stock has increased in value by 6 percent every year for the past five years. Assume that the Oracle stock value continues to increase by 6 percent each year.

Complete the following spreadsheet to help Raju analyze his investment opportunities and potential returns.
$\qquad$ Date $\qquad$ Class $\qquad$

| Investment Costs: | Mutual Fund <br> Participation Certificate | Oracle <br> Stock |
| :--- | :--- | :---: |
| Investment amount |  |  |
| Plus Commission |  |  |
| Total Investment Costs |  |  |
| Annual Anticipated Returns: |  |  |
| Annual interest or dividend earned Year 1 |  |  |
| Annual interest or dividend earned Year 2 |  |  |
| Annual interest or dividend earned Year 3 |  |  |
| Annual interest or dividend earned Year 4 |  |  |
| Total earned |  |  |
| Pren |  |  |

Potential Value at Year 4:

| Market Value of investment at Year 4 |  |  |
| :--- | :--- | :--- |
| Summary Information: |  |  |
| Potential selling price |  |  |
| Less investment cost |  |  |
| Profit from sale of investment |  |  |
| Plus interest or dividend returns |  |  |
| Potential profit and interest from <br> transaction |  |  |

## Spreadsheet Directions

1. Start your spreadsheet software program and open problem SA11.xls.
2. Record Raju's costs involved with each investment opportunity to determine his total investment costs.
3. Next, compute the annual returns expected for each investment. Remember that Raju does not intend to reinvest interest earnings.
4. To compute the potential value of each investment at Year 4, review the data presented for the anticipated increase for the mutual fund and the stock. Insert formulas to compute these increases in value.
5. Finally, determine the potential profits and interest from each transaction based on the data presented.
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6. Perform your calculations and complete the spreadsheet, then save your work to a new file labeled SA11***.xls. (Replace $* * *$ with your initials.)
7. Print out a copy of your work if your teacher has instructed you to do so.

## Interpreting Results

1. How many shares of Oracle stock could Raju purchase with his graduation gift?
2. What would the total investment cost be for the mutual fund participation certificate?
3. What amount of dividend income does Raju expect to earn over the four years that he plans to hold the shares of Oracle stock?
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4. If the assumption for each investment's potential value were realized, what total profit and interest for each investment would be earned?

## Drawing Conclusions

1. Assuming that Raju wants to invest his money in an investment that carries less risk, which investment would you recommend? Explain.
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2. Before Raju invests his money, list the types of research that he should do to investigate his investment interests. What sources of information would help Raju make an informed decision?
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## Chapter 14 Planning Your Tax Strategy

## SOFTWARE ACTIVITY (OPTIONAL)

## Spreadsheet Application

## Computing Taxable Income and Tax Liabilities

Objective: Evaluate financial data in order to compute taxable income and tax liabilities.

## Practice Situation

Shelly Calloway is a CPA and prepares income tax returns for several clients. Her clients have dropped off their income and expense data to her, and she has organized the information in the following manner as she prepares to complete their returns. Compute the adjusted gross income and tax due or tax refund amounts for Shelly's clients.

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$\qquad$ Class $\qquad$

|  | Greg <br> Miller | Cheryl <br> Stafford | Valerie <br> Bowman |
| :--- | :--- | :--- | :--- |
| Adjusted Gross Income Computation |  |  |  |
| Gross Income (wages and salary) |  |  |  |
| Plus Interest Income |  |  |  |
| Total Income |  |  |  |
| Less IRA Deductions |  |  |  |
| Adjusted Gross Income |  |  |  |
| Tax Computation |  |  |  |
| Adjusted Gross Income |  |  |  |
| Less Itemized Deduction or Standard <br> Deduction Amount |  |  |  |
| Less Exemptions Amount |  |  |  |
| Taxable Income |  |  |  |
|  |  |  |  |
| Tax |  |  |  |
| Less Tax Credits |  |  |  |
| Total Tax |  |  |  |
| Tax Withheld |  |  |  |
|  |  |  |  |
| Tax Due |  |  |  |
| Tax Refund Due |  |  |  |


| Computation of Itemized Deduction for Cheryl Stafford: |  |  |  |
| :---: | :--- | :--- | :--- |
| Adjusted Gross Income |  |  |  |
| Medical Expenses Deduction: |  |  |  |
| Medical Expenses Paid |  |  |  |
| $7.5 \%$ of gross income |  |  |  |
| Medical Expenses Deduction |  |  |  |
| Taxes Deduction: |  |  |  |
| Real Estate Taxes |  |  |  |
| Gifts Deduction: |  |  |  |
| Gifts to Charity |  |  |  |
|  |  |  |  |
| Total Itemized Deduction |  |  |  |

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## Spreadsheet Directions

1. Start your spreadsheet software program and open problem SA12.xls.
2. Record gross income and interest income amounts for Greg Miller to compute his Total Income. Deduct Mr. Miller's IRA deduction from that amount.
3. Fill in the amounts for Mr. Miller's standard deduction and exemptions. Subtract standard deduction and exemption amounts from Adjusted Gross Income to compute his Taxable Income.
4. Use the tax rate schedule provided on page 140 and insert the formula to calculate Mr. Miller's tax due based on his taxable income. Next, adjust his tax due by any tax credits listed.
5. Input the deductions from Mr. Miller's paychecks. If the amount exceeds his tax due, he is entitled to a refund.
6. Repeat the same procedure for Ms. Stafford and Ms. Bowman. For Ms. Stafford, compute her total Itemized Deduction amount using the "Computation of Itemized Deduction for Cheryl Stafford" section of your spreadsheet.
7. After you complete the spreadsheet, save your work to a new file labeled SA12***.xls. (Replace *** with your initials.)
8. Print out a copy of your work if your teacher has instructed you to do so.

## Interpreting Results

1. When completing the final tax returns for each client, which tax form is most appropriate for each client?
2. What is the taxable income for each of Shelly's clients?
3. Which of Shelly's clients will receive a tax refund? What is the amount?

## Drawing Conclusions

1. When computing itemized deductions, what types of items should be considered? What criteria are used to determine whether the standard deduction should be used instead? Explain.
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2. Explain the difference between an exemption and a standard deduction.
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## Chapter 15 Home and Motor Vehicle Insurance

## SOFTWARE ACTIVITY <br> (OPTIONAL)

## Spreadsheet Application

Evaluating Home and Motor Vehicle Insurance Policy Coverage
Objective: Evaluate home and motor vehicle insurance policies and compute claim coverages.

## Practice Situation

Eric Fowler and his wife Susan just purchased their first home, which cost \$130,000. They purchased a homeowners policy to insure the home itself for $\$ 120,000$ and personal property coverage of $\$ 75,000$. They declined any coverage for additional living expenses. The deductible for the policy is $\$ 500$. Eric's Ford Mustang and Susan's Toyota Corolla are insured with the same insurance agent. They have 50/100/15 vehicle insurance coverage.

Soon after Eric and Susan moved into their new home, a strong windstorm caused damage to their roof. They reported the roof damage to be $\$ 17,000$. While the roof was under repair, the couple had to live in a nearby hotel for three days. The hotel bill amounted to $\$ 320$. That same week, Susan had an accident. She lost control of her car and hit a parked car and damaged a storefront. The damage to the parked car was $\$ 4,300$ and the damage to the store was $\$ 15,400$.

Assuming the insurance company settles claims using the replacement value method, what amount will the insurance company pay for the damages to the roof? What amount will the insurance company pay for Susan's car accident? Use the following spreadsheet to make your computations.

| Home Damages |  |
| :--- | :--- |
| Home value |  |
| Insured amount |  |
| Damage amount reported |  |
| Additional living expenses incurred |  |
| Total expenses incurred from windstorm |  |
| Deductible on the policy |  |
| Insurance company covered amount |  |
| Eric and Susan's costs |  |
| Car Accident |  |
| Store damage amount |  |
| Parked car damage amount |  |
| Total damages |  |
| Insurance company covered amount |  |
| Eric and Susan's costs |  |

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## Spreadsheet Directions

1. Start your spreadsheet software program and open problem SA13.xls.
2. Record the value of Eric and Susan's home along with the insured amounts for the structure and personal property. Note: Format all dollar amounts to Currency, decimal places $\underline{0}$.
3. Next, record the amount of roof damage reported and the cost of additional living expenses incurred.
4. Using the information presented about Eric and Susan's homeowners policy, compute the amount of damage that will be covered by the insurance company. Calculate the total amount that Susan and Eric will have to pay for this occurrence.
5. Now, review the information about Susan's car accident. Record the damage amounts for the parked car and storefront. Insert the formula to compute the total damages.
6. Record the amount that will be covered by the insurance company for property damages. Then insert the formula to calculate the remaining amount that Susan and Eric will have to pay for the accident.
7. Complete the spreadsheet, then save your work to a new file labeled $\mathbf{S A 1 3}$ ***.xls. (Replace *** with your initials.)
8. Print out a copy of your work if your teacher has instructed you to do so.

## Interpreting Results

1. What amount will the insurance company pay for the damage to Eric and Susan's roof?
2. What amount will Susan and Eric have to pay for Susan's car accident?
3. What amount will the insurance company pay for Susan's car accident?
4. Based on the information presented, what bodily injury coverage is included in Eric and Susan's motor vehicle insurance policy?

## Drawing Conclusions

1. If Eric and Susan's vehicle coverage had been 50/100/25, what impact would this have had on the amount they owed for this accident? Explain.
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2. If items inside Eric and Susan's home had been damaged as a result of the windstorm, would these items have been covered by their homeowners policy? Explain.
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## Chapter 16 Health, Disability, and Life Insurance

## SOFTWARE <br> ACTIVITY <br> (OPTIONAL)

## Spreadsheet Application

## Comparing POS, HMO, and Private Insurance Coverages

Objective: Evaluate and compare the costs associated with three major forms of health insurance.

## Practice Situation

Ronald Roth started his new job as a controller with Aerosystems today. Carole, the employee benefits clerk, has given Ronald a packet that contains information on the company's health insurance options. Aerosystems offers its employees the choice between a private insurance company plan, an HMO, and a POS. Ronald needs to review the packet and make a decision on which health care program fits his needs. The following is an overview of the information with which he was provided.

1) Private insurance company plan: The monthly premium cost to Ronald will be $\$ 42.32$. For all doctor office visits, prescriptions, and major medical charges, Ronald will be responsible for 20 percent and the insurance company will cover 80 percent of covered charges. The annual deductible is $\$ 500$.
2) The HMO is provided to employees free of charge. The copayment for doctor's office visits and major medical charges is $\$ 10$. Prescription copayments are $\$ 5$. The HMO pays 100 percent after Ronald's co-payment. The HMO does not have an annual deductible.
3) The POS requires that the employee pay $\$ 24.44$ per month to supplement the cost of the program with the company's payment. If Ron uses health care providers within the network plan, he pays the co-payments as described above for the HMO. He can also choose to use a health care provider out of the service and pay 20 percent of all charges, after he pays a $\$ 500$ deductible. The POS will pay for 80 percent of those covered visits. The POS does not have an annual deductible.
Ronald has decided to review his medical bills from the previous year to see what costs he incurred and to help him evaluate his choices. He visited his general physician four times during the year at a cost of $\$ 125$ for each visit. He also spent $\$ 65$ and $\$ 89$ on prescriptions during the year. Using these costs as an example, what would Ron pay for each of the plans described above? (For the purposes of the POS computation, assume that Ron visited a physician outside of the network plan. Assume he had his prescriptions filled at a network-approved pharmacy.)
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$\qquad$ Class $\qquad$

|  | Private Insurance <br> Ron's Annual Costs | HMO Ron's <br> Annual Costs | POS <br> Ron's Annual Costs |
| :--- | :--- | :--- | :--- |
| Ronald's annual <br> premium costs |  |  |  |
| Sample medical <br> costs: |  |  |  |
| 4 office visits |  |  |  |
| 2 prescriptions |  |  |  |
| Total medical costs |  |  |  |

## Spreadsheet Directions

1. Start your spreadsheet software program and open problem SA14.xls.
2. Insert the formula to compute the annual premium charges for each insurance option.
3. Using Ronald's sample medical expenses, insert formulas to compute his charges for four office visits and two prescription charges for each plan. Remember to consider the $\$ 500$-deductible that Ron is responsible for under the private insurance company plan and the POS plan.
4. Insert the formulas to total the annual medical charges. Note: Format all dollar amounts to Currency, decimal places $\mathfrak{2}$.
5. Perform your calculations and complete the spreadsheet, then save your work to a new file labeled SA14***.xls. (Replace ${ }^{* * *}$ with your initials.)
6. Print out a copy of your work if your teacher has instructed you to do so.

## Interpreting Results

1. Using the sample medical expenses provided for your calculations, determine what annual medical costs Ronald will pay if he were to enroll in the private insurance company plan.
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2. What total medical costs will Ronald pay if he enrolls in the HMO plan?
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3. What annual medical costs did you compute for Ronald if he selects the POS plan?
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## Drawing Conclusions

1. What are the benefits of the POS plan that Ronald has been offered?
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2. In addition to the financial considerations in choosing a health care plan, list other concerns that Ronald should evaluate when making this decision. Explain.
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